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The American Way of Operational Art:  
Attrition or Maneuver?

A Monograph  
by  
Major Kevin P. Anastas  
Armor



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School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas

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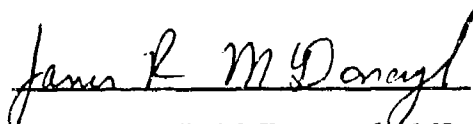
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## ABSTRACT

THE AMERICAN WAY OF OPERATIONAL ART: ATTRITION OR MANEUVER? by MAJ Kevin P. Anastas, USA, 60 pages.

This monograph seeks to determine if Americans have consistently favored one form of operational art over another. If we (the U.S. military) do not recognize that a tendency towards one or the other forms of operational art exists, we may unwittingly miss an opportunity to exploit a change in some aspect of warfare. In a rapidly changing world, our military doctrine must stay as close to reality as possible. For the U.S. military to meet this challenge, we must understand why we do the things we do.

The paper is organized into three major sections: theory, history, and conclusions. Applicable theory is used to establish a basis for evaluating historical evidence. The possible selections form a spectrum with firepower-attrition on one extreme and maneuver on the other. Historical examples used to test this theory range from the earliest operations of the industrial age in the Civil War, through the recent U.S. campaign in the Persian Gulf. Each campaign is evaluated using the same basic format. This includes identifying the form of operational art, establishing where it falls on the firepower-maneuver spectrum and, perhaps most importantly, analyzing the reasons for adopting the approach taken.

Based on this theoretical and historical analysis, this paper draws several conclusions concerning the American way of operational art. From the Civil War through Vietnam, American operational art consistently relied on firepower-attrition to win campaigns. Only in exceptional cases—usually related to a shortage of resources—did U.S. forces exploit the power of maneuver to multiply available combat power. DESERT STORM seems to mark at least a partial departure from this long established pattern. For the first time, the U.S. chose to maneuver when a head-on application of overwhelming power could have accomplished the same objective. This almost unprecedented use of maneuver in order to minimize U.S. casualties indicates that future American operations may strike a better balance between firepower-attrition and maneuver.

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## **I. Introduction**

The original means of strategy is victory—that is, tactical success; its ends, in the final analysis, are those objects which will lead directly to peace. . . . Insofar as [a tactical battlefield victory] is not the one that will lead directly to peace, it remains subsidiary and is also to be thought of as a means. . . .<sup>1</sup>

Clausewitz

During the American Civil War, Confederate General Nathan Bedford Forrest explained his battlefield success with the simple statement, "I just . . . got there first with the most men."<sup>2</sup> Forrest's single phrase says what innumerable military thinkers have filled volumes trying to explain. Using a bit of literary license, we can apply his pithy remark to a current debate concerning operational art. One way to interpret Forrest's maxim is to equate getting there "first" with what we consider to be the components of maneuver and "with the most men" as meaning superior combat power or firepower. If we make these interpretations, then Forrest's statement seems to argue for both components in some sort of balanced proportion. Throughout our history, however, Americans have not always agreed that there should be a balance between firepower and maneuver.

The purpose of this monograph is to analyze selected American military operations from the Civil War to DESERT STORM and determine if Americans have consistently favored one form of operational art over another. The possible selections form a spectrum with firepower-attrition on one extreme and maneuver on the other. If a trend or bias favoring one or the other can be identified, this paper will attempt to discern why a particular form

was chosen. Finally, the paper will attempt to draw some conclusions from the evidence and discern implications for the future.

This monograph is organized into three major parts. The first will briefly review some relevant theories concerning the conduct of operations. Theory is valuable in that it can provide an outline of categories that may help us understand the varied approaches used by commanders throughout our history. Theory may also assist us by highlighting some common points to consider when we compare the campaigns.

The second major portion of the paper is its centerpiece. It will evaluate the historical evidence of selected American operations. Since the operational level of war became more important in the latter half of the nineteenth century, it will begin by looking at several campaigns from the American Civil War. The paper will then survey representative campaigns throughout our history—up to and including our most recent experience, operation DESERT STORM. It will analyze each campaign using the same basic criteria. These include identifying the form of operational art employed, the reasons for selecting that form, and where on the spectrum between firepower-attrition and maneuver the campaign fits.

In the final major subdivision, this paper will attempt to draw some conclusions from the survey of American operations and discuss implications for the future. Before launching into the maze of historical evidence, however, let us review some relevant theoretical concepts so that we might have a sort of road map to guide us.



## II. Theory

The primary purpose of any theory is to clarify concepts and ideas that have become, as it were, confused and entangled.<sup>3</sup>

Clausewitz

History and experience tell us that war at the operational level is extremely complex. There are countless ways a theater commander can combine assets to reach his operational objective. Since, according to Clausewitz, one of the main functions of theory is to "put all this in systematic order, clearly and comprehensively" it is useful to begin our analysis by outlining some theoretical categories that can provide a structure for our study.<sup>4</sup> Of course, reality does not recognize such clearly defined categories, so we must remind ourselves that in the real world, friction dilutes the absolute. If we remember this, the theoretical model can help define the limits of the problem and aid our understanding of these complex issues.

As previously mentioned, this study will use two forms of operations to define the extremes on the spectrum of possible combinations. These forms are firepower-attrition on the one hand, and maneuver on the other.

In the firepower-attrition model of warfare, belligerents seek to wear down the **physical** forces of the enemy through a favorable exchange rate. The focus is on the **tactical** level, since enemy casualties are the goal, and success is measured by "body counts." It does not matter where tactical success takes place as long as casualties are inflicted. Deployments tend to be **broad** and **linear**. Objectives are generally defined in terms of **terrain**. Set piece **frontal** attacks are the norm and both sides usually suffer high

casualties. The side with the most resources has the best chance to win. Since more is better, this form of operations usually requires **mass conscript armies**. Maneuver is used to position firepower so it can better inflict casualties. The defeat mechanism of this form is simply erosion of the enemy's combat power.<sup>5</sup> The bottom line, as military theorist Richard Simpkin states, is that "attrition theory. . . is about fighting and primarily about casualties."<sup>6</sup> (see Appendix A for a summary of the characteristics of firepower-attrition warfare)

A classic example of firepower-attrition at the operational level is the German campaign at Verdun in 1916. German Field Marshal Erich von Falkenhayn's stated purpose was "to bleed France white." He used the terrain objective of Verdun to attract French reserves and attempted to destroy them with superior firepower. He ultimately failed to beat the French because the Germans did not have sufficiently superior resources and they suffered almost as many casualties as the French.<sup>7</sup>

In contrast to this bloody minded approach, maneuver warfare seeks to defeat the enemy by destroying his **moral** cohesion not his physical assets. The focus is at the **operational level** since individual tactical battles have no meaning except in the context of the operation. Deployments tend to be in **depth** and forces are **concentrated** against enemy weaknesses. Objectives are almost always **force oriented**. Battles are fluid and the side that successfully employs maneuver generally suffers substantially fewer casualties than the enemy. Since maneuver warfare is more difficult to execute, the best maneuver armies tend to be smaller and more

**professional.** Firepower is used to create openings and provide more opportunities for maneuver. While bypassed enemy forces are sometimes annihilated with fires, the key defeat mechanism is the collapse of the enemy's cohesion by moving and acting more rapidly than he can react.<sup>8</sup> (see Appendix A for a summary of the characteristics of Maneuver warfare)

A classic example of maneuver warfare is the German invasion of France in 1940. The Germans concentrated their small, elite panzer troops at a weak point in the French defense. They almost immediately began operating inside the enemy's decision cycle and destroyed the cohesion of the French defenders. The operational objective of the campaign was clearly force oriented and they achieved their purpose by annihilating the Allied armies through encirclement.

Theory can also help us understand some of the factors that determine when and why armies adopt one or the other forms of operations. The force that attempts the attrition approach must clearly have an advantage in resources or it would be suicide for them to enter into a conflict. In theory, the side with the superior resources is free to choose between the two forms. In practice, as we shall see in the historical section, circumstances often determine the approach taken.

One reason that the side with superior resources does not always adopt maneuver is the inherent clumsiness of mass armies. Superior human resources can become so much cannon fodder if that force is ill-trained and slow moving. The relative qualities of the forces

involved and the raw materials available often determine what form is most appropriate for a particular situation.

The side with fewer resources is even more constrained in its choices. This "inferior" force generally must multiply its combat power by using maneuver.<sup>9</sup> Theorist Richard Simpkin explained this phenomenon with the analogy of "leverage." The striking value of the smaller force can be increased if it is swung at the end of a lever arm against the enemy's flank or rear.<sup>10</sup> This admittedly simplistic model neatly summarizes the effect maneuver can have. Theory leads us to expect forces facing enemies with equal or superior resources to adopt maneuver warfare techniques.

As long as we keep the limits of theory in mind, it can help us understand complex problems. Neither firepower-attrition nor maneuver exist in pure form. Lieutenant Colonel Huba Was de Czege chastised those who do not recognize this when he wrote: "The critics have created two uniformly unreal, but academically convenient, polar cases. The real world lies between."<sup>11</sup> While theory has its limitations, it gives us a logical structure for analyzing real historical examples.

The purpose of this review of several relevant operational theories was to provide an outline for our investigation of American operations. With these categories in mind, let us now turn to the historical analysis itself to see if we can discern any patterns from our past.

### **III. History**

There is certainly considerable evidence that the Americans all too rarely attempted to hurry the breaking point by manoeuvre or operational subtlety of any kind.<sup>12</sup>

John Ellis

#### **Civil War to WW II**

The Vicksburg Campaign is a logical place for us to begin our review of American operations for several reasons. Some theorists argue that modern operational art began during this war.<sup>13</sup> Most at least agree that the operational level became more important as battles became less decisive. Modern military reformers (maneuverists) as well as current doctrine writers consider the Vicksburg Campaign to be an example of maneuver warfare at its best.<sup>14</sup> Vicksburg is thus an appropriate campaign with which to begin this analysis.

In some respects, General Grant was forced to conduct a campaign of maneuver to capture Vicksburg. His first inclination was to use the direct overland route down the Illinois Central Railroad. When Confederate cavalry destroyed his base at Holly Springs, Grant was forced to shift his main effort to the river. He then tried a series of five attempts to bypass the fortress. When the last of these failed, both Sherman and Grant agreed that the best approach was to return to Memphis and try the overland route again. Unfortunately, the press was ready to pronounce any move back upriver a retreat. Since they were already calling for his removal, Grant did not consider it a viable option.<sup>15</sup> Thus Confederate cavalry raids and public opinion

both played a part in influencing Grant's decision to take the indirect approach.

Another reason for Grant to take the maneuver approach was the fact that he did not have an overwhelming superiority of resources. Once he crossed the Mississippi, Grant commanded 41,000 men compared to the combined Confederate force of approximately 44,000.<sup>16</sup> Without superior numbers, Grant had to find a way to multiply his combat power. He sought to do this through maneuver from the central position (interior lines). If Grant's force had been decisively superior in numbers, we do not know what form of maneuver he would have chosen. We do know that limited resources contributed to his decision to conduct a relatively high risk maneuver campaign.

While he was compelled by circumstances to maneuver on Vicksburg, Grant still maintained a terrain orientation more suitable to attrition theory than one focused on the enemy force. Maneuver theory argues that objectives defined in terms of terrain are usually associated with attrition.<sup>17</sup> Grant's aim was clearly on opening the Mississippi by eliminating the Confederate positions rather on annihilating the enemy army. The campaign did succeed in capturing the enemy force, but this was an additional bonus rather than Grant's primary operational objective.<sup>18</sup>

While Grant's Vicksburg campaign did not aim at annihilation of the enemy army, in other ways it did reflect the main characteristics of the maneuver school. Grant disrupted the enemy psychologically when he cut his own communications with the river and maneuvered

towards the rail hub at Jackson.<sup>19</sup> He was clearly inside the enemy's decision cycle when his massed forces met a smaller Confederate army at Champion's Hill. And finally, while he did not intend it from the start, Grant's brilliant campaign of maneuver resulted in the capture of the entire enemy army. Grant's Federals forced an army to surrender more as a result of maneuver than through overwhelming power.

The relatively inexperienced Union troops were able to conduct this sweeping maneuver partially due to the technical skills of the navy. Historically, untrained forces have had to rely on simple formations and maneuvers until experience taught them the necessary skills. Grant's men, while relatively the equal of their opponents, were neither hardened veterans nor were they led by professionals. While his early campaigns and the five attempts to bypass Vicksburg gave his men time to develop their skills in the field, Grant still had relatively inexperienced leaders—especially at the higher levels.<sup>20</sup> For example, one of his corps commanders was a politician with little military training at all. Another had been one of Grant's aides in May of 1862 and six months later was a Major General and a corps commander.<sup>21</sup> Thus the commanders as well as many of the troops were learning their jobs by doing them. This is not usually a good situation for a force that relies on maneuver for success.

In partial compensation for this inexperience, the relatively professional Federal navy gave Grant an advantage the Confederates could not challenge. In the past, the same sort of advantage had

accrued from professional engineers and artillerymen. The new steam navy added another area where these skills counted. Technical expertise was to become a characteristic of U.S. operations in this war as well as in the future.

In summary, the Vicksburg campaign was a masterpiece of maneuver warfare. The current FM 100-5 neatly sums up the results:

Setting a pace of operations so rapid that his enemies could not follow his activities, Grant defeated the forces of Generals Johnston and Pemberton in five successive engagements. He covered 200 miles in 19 days, capturing Jackson and driving the defenders of Vicksburg into their trenches. Grant's 4,000 casualties were only half as great as his enemy's. Within 6 weeks the 30,000 men of the Vicksburg garrison surrendered, giving the Union undisputed control of the Mississippi and dividing the Confederacy.<sup>22</sup>

Despite this tremendous success in 1863, it was Grant's 1864 campaign that became the model for American planners. By the spring of 1864, Grant commanded all Union forces. In total numbers of men and resources he was significantly superior to the Confederates. He had enough men and equipment to take the enemy head-on—and he did. The same commander who had conducted "the most brilliant [campaign] ever fought on American soil" one year earlier, reverted to attrition in 1864.<sup>23</sup>

Grant's intent for the campaign was to attack on a broad front and apply all the superior resources of the Union to the fight. His own words, in a report to the Secretary of War, best describe his vision:

I therefore determined, first, to use the greatest number of troops practicable against the armed force of the enemy,



preventing him from using the same force at different seasons against first one then another of our armies, and the possibility of repose for refitting and producing necessary supplies for carrying on resistance; second, to hammer continuously against the armed force of the enemy and his resources until, by mere *attrition*, if by no other way, there should be nothing left to him but an equal submission. . . .<sup>24</sup>

Grant's inability to outmaneuver Robert E. Lee caused the campaign to rely on attrition for a decision. Grant may have wanted to defeat Lee through a campaign of maneuver, but he adopted a conservative approach instead since he was secure in his overall superiority of resources.<sup>25</sup> Unless he did something very stupid, the manpower and industrial might of the North almost guaranteed victory. Unfortunately, the cost in lives was much more than it might have been had he conducted a successful campaign of maneuver. While Grant might have been a maneuverist at heart, the lessons taken from the war by future army officers was that overwhelming power could defeat any enemy in a general conflict "without the subtleties of maneuver."<sup>26</sup> While everyone admired the brilliant maneuver campaigns conducted by Lee, they adopted the techniques of the bloody but successful campaign of attrition waged by Grant. Professor Weigley concluded that "Despite the veneration of R.E. Lee in American military hagiography, it was U.S. Grant whose theories of strategy actually prevailed."<sup>27</sup>

None of the lessons of the Civil War were proven incorrect by our experience in the First World War. In fact, the 1864-65 campaign is often seen as the precursor to the trench stalemate of 1914-18. Our experience was too short and our planning input to the actual

campaign strategy too limited, however, for the American high command to have a significant impact on Western Front plans. The U.S. adopted the standard broad front, heavy firepower attacks used by all Allied forces in France. Tactical problems overrode operational considerations and thus few operational lessons were learned. While General Pershing, the American Expeditionary Force commander, had little input to the Allied strategy, the plans he did make followed Grant's concept.<sup>28</sup> Thus the lessons of overwhelming power learned in 1865 still applied in 1918. These same techniques were applied again by another generation of campaign planners in the Second World War.

### **WW II, Europe**

The United States planned to use a strategy of annihilation to achieve its political aims against the Axis powers in the European Theater.<sup>29</sup> One might assume that the logical operational technique to carry out this strategy would be one of maneuver warfare. In fact, American planners deliberately constructed a ground force designed to be the most mobile in the world with this objective in mind.<sup>30</sup>

Despite this maneuver based force structure, the American way of operational art—as actually conducted in the European Theater—more closely resembled the firepower-attrition model. The successful application of this model in the Second World War caused it to have a major influence on U.S. operational planners ever since.

Perhaps the best way to highlight American reliance on firepower-attrition is to consider how planners handled opportunities for maneuver and encirclement during the major operations of the

European campaign. One striking aspect of the Normandy operation is the fact that Allied planners neither anticipated nor planned for deep exploitation or encirclement operations. They projected successive phase lines out to D+90 when they projected that the lodgment would have reached the Seine River.<sup>31</sup> This plan resembled nothing so much as a World War I, shoulder-to-shoulder push. Despite some later claims by General Eisenhower's ground component commander that he foresaw a battle of annihilation in Normandy, historian Russell Weigley concluded that, "the specifics of the OVERLORD planning did not contemplate it. Instead, the design was merely to push the enemy forces out of the OVERLORD lodgment area between the Seine and the Loire."<sup>32</sup> Weigley goes on to highlight the inconsistency between the stated strategy and the operational technique adopted:

If, however, the central purpose of strategy is to destroy the enemy armed forces, as American strategic tradition consistently emphasized, then at least the planning should include preparation to seize an opportunity for annihilation if the opportunity should arise.<sup>33</sup>

This failure to focus the operation on an objective of encircling and destroying German forces in the Normandy area had predictable results on the ground. German commanders had little trouble extricating their forces from Allied maneuvers. For example, the commander of the 346th Infantry Division in Normandy found that even when his troops were in danger of being encircled and had to fall back, "we were never hurried in these movements because of the systematic . . . tactics of the Allies." He went on to note that his unit

was always given time to withdraw during hours of darkness while the Allied troops regrouped for the next day's operations. These pauses allowed the enemy to retreat in good order and clearly indicate that the operational plan did not have encirclement as one of its primary purposes.<sup>34</sup>

Once Allied forces broke out of the hedgerow country, more indications of the true nature of the operation became apparent. The decision to clear the Brittany ports instead of exploiting to the east showed that Allied operational objectives were focused more on maintaining the lodgment than with annihilating the enemy. This terrain rather than force orientation clearly supports the firepower-attribution model.

Major General John S. Wood, the commander of the first division to breakout from Normandy through Avranches, immediately saw the opportunity to turn east and drive "in[to] the enemy's vitals."<sup>35</sup> But, as his biographer concluded, "the division was checked by plans, conceived in caution before the invasion, perpetuated after the invasion by strategical [operational] inflexibility."<sup>36</sup> Even General George Patton, who normally personified the leadership required by maneuver warfare, seems to have temporarily lost the operational perspective and ordered Wood to turn back to the West.<sup>37</sup>

Patton's immediate superior was even more confused by the unexpected opportunities and was much slower to realize the possibilities. As late as 2 August, after the Fourth Armored Division had broken out and was approaching the road hub at Rennes, the 12th Army Group commander, General Omar Bradley, was still

thinking conservatively and holding with the original plan. At this point, when all the advantages of exploitation and pursuit beckoned, Bradley was thinking of an advance all along the American line and was worried about his flanks. He feared for the gap between Third Army forces in Brittany and those turning east. He also feared a German counterattack on the boundary between the American First and British Second Armies. Overall, his main concern seemed to be straightening the line rather than exploiting a fleeting opportunity.<sup>38</sup> Patton gave perhaps the best assessment of leadership in the 12th Army Group and First Army when he observed that: "Bradley and [Lieutenant General Courtney H.] Hodges are such nothings. Their one virtue is that they get along by doing nothing . . . They try to push all along the front and have no power anywhere."<sup>39</sup> Both Hodges and Bradley demonstrated leadership styles that seem better suited to the deadlocked battlefields of the First World War than to the more fluid arenas of the Second.

Some German officers agree with Patton's rather harsh assessment of Bradley and Hodges. For example, General Elfeldt, who commanded one of the most vulnerable German corps after the American breakout, told an interrogator: "The American troops, of the First Army, on my front were not tactically at all clever. They failed to seize opportunities—in particular they missed several chances of cutting off the whole of my corps."<sup>40</sup> A more recent assessment by a British historian summed up the U.S. problem after the breakout, "even when they had escaped this constricting terrain [hedgerows], the Americans still failed to show any marked penchant

for mobile operations that might pin and entrap significant enemy pockets."<sup>41</sup>

Interestingly, while Bradley was busy trying to straighten his line rather than aggressively trying to annihilate the enemy, both the theater commander and his ground component commander saw possibilities for encirclement. Field Marshal Sir Bernard Montgomery apparently saw how events had changed the assumptions used for the original plan. He almost immediately decided that the main effort should be against the enemy force rather than against the ports. He began developing plans for an envelopment operation designed to trap the German Seventh Army against the barrier of the Seine. Likewise, Eisenhower saw some similar, if slightly more conservative opportunities. His immediate inclination was to conduct several smaller encirclements than the one eventually attempted at Falaise.<sup>42</sup> The fact that neither encirclement took place may indicate something about the ability of the Allied staff to adjust to the tempo of maneuver warfare. When they finally did agree on closing an encirclement in the vicinity of Falaise, their ability to synchronize operations proved as faulty as their untimely planning.

Operations before and during the Falaise debacle do not indicate that Allied staffs were adept at maneuver warfare. Patton's highly touted pursuit, once it finally got going, did make some remarkable progress. On the other hand, his advance was almost unopposed. The Germans had already started to withdraw and their entire force was in disarray. Despite this lack of determined defenders, Patton's

pursuit failed to encircle any significant enemy forces before the Falaise operation.<sup>43</sup>

The failure to close the gap and thus encircle and annihilate the German Seventh Army at Argentan-Falaise was costly. The escape of at least leadership cadres from the partially encircled force significantly improved the ability of the German Seventh Army to reconstitute its combat power.<sup>44</sup> It also demonstrated how unprepared the Allied leaders were to fight maneuver warfare.

A good portion of the blame for the failure at Falaise must be laid on General Bradley. First, he suggested a more conservative, short envelopment in the vicinity of Argentan-Falaise rather than the deeper plan to go all the way to the Seine.<sup>45</sup> Once Eisenhower approved the short envelopment, Bradley convinced him (despite Patton's vehement protests) that Patton should not advance beyond Argentan. Bradley stuck to the halt order despite the fact that Montgomery's Canadians quickly bogged down around Falaise and were unable to close the gap.<sup>46</sup> Bradley thus played a key role in first arguing for the more conservative operation and then failing to persist in completing it. His worries about the problems with a head-on link up with the British perhaps illustrate how little his army and its leaders had practiced the skills necessary to execute encirclements—the most decisive operational maneuver. Of course, if he planned to conduct a more conventional, set piece, slow moving, broad front advance, then these advanced skills would not be needed. In the event, Bradley was one of the key reasons why the Allies did not totally destroy the German Seventh Army in Normandy. Only one

German division was totally eliminated from the German order of battle in the Falaise pocket.<sup>47</sup> Clearly the American Army of August 1944 had not trained for, was not properly equipped for, and did not have a doctrine suitable for decisive maneuver warfare.

The most commonly cited issue used to show the attrition based nature of Allied operations in Europe is Eisenhower's decision to advance into Germany on a broad front rather than with a knifelike thrust. Despite its obvious firepower-attrition basis, this evidence does not prove that Eisenhower was against a maneuver approach. In fact, political considerations overruled all other factors in this case including those based on military efficiency. If the supreme commander had held back U.S. forces and supported a British drive into the heart of the Reich, American public opinion would hardly have approved. Since America provided 55 divisions while Britain and Canada fielded only 13 in Northwest Europe, we can understand why Eisenhower told Montgomery that "it is certainly not possible" to give one army or the other exclusive priority.<sup>48</sup> Thus the politics of coalition warfare forced Eisenhower to adhere to the broad front approach consistent with the firepower-attrition model.

Two final examples serve to illustrate the firepower-attrition flavor of U.S. operations in the European Theater. The first is the tragic episode in the Hürtgen Forest. This operation was the result of an overly conservative estimate of German capabilities. The result was a major attack into the tangled terrain of the Hürtgen Forest.<sup>49</sup>

The battle quickly became an attrition fight with the Germans holding every advantage while areas of U.S. superiority were



neutralized. One German general had a clear opinion concerning the advisability of the attack:

There was no use the Americans going through the Hürtgen Forest, as it was easy to see it would be hard to take and easy to defend. Had you gone around it on both sides, you would have had almost no opposition. We did not have enough troops in the area at the time. Also, had you bypassed the area, we could not have launched a big counter-attack there, not with the army of 1944.<sup>50</sup>

Historian Weigley summed up the problems when an army designed for maneuver gets into a battle of attrition. "An army that depends for superiority on its mobility, firepower, and technology should never voluntarily give battle where these assets are at a discount; the Huertgen Forest was surely such a place."<sup>51</sup> This was good advice for the planners of the Hürtgen operation; it remains good counsel for American operational planners today.

The final example of the tendency towards attrition in the European Campaign is the Allied operational response to the German Ardennes offensive. Many today hold up the Third Army wheel to the left and counterattack as the ultimate example of maneuver warfare executed by the U.S. in Europe. The facts are somewhat different.

Patton's brilliant conduct of the preliminary operations has gained deserved acclaim. On the other hand, it was not unprecedented in numbers moved, speed, or distance covered. Several German maneuvers were equally or—given their dearth of equipment—even more impressive. Nevertheless, the management of the complex movement was exemplary and earned a somewhat sarcastic compliment from Historian John Ellis: "General Patton

should always be remembered as one of the best traffic policemen in the history of warfare."<sup>52</sup> Ellis' point is that the Patton's management of the movement was better than his application of combat power to accomplish the operational goal.

When he had to fight through real opposition, Patton's maneuver style was less than the maneuverists' ideal. First of all, the maneuver was conservative in concept. The best way to cut off a salient is to attack its base. The plan that Patton was told to execute (against his wishes) was aimed at the waist of the bulge instead. The main reason for this conservatism was the bad road net to the east that American commanders determined would not support a heavy armored attack.<sup>53</sup> While this was a legitimate concern, the psychological impact of a deep attack may have been enough to overcome the physical problems. The preoccupation with physical destruction without considering the psychological impact is another indicator of the attrition mind-set in the U.S. Army.

In addition to the flawed concept of "short envelopment," Patton's tactical techniques did not fit the operational objective. The goal was to cut off and destroy the German attackers. The best technique to accomplish this would seem to be a narrow penetration designed to get deep fast. Instead, "Patton forsook the advantages of a concentration . . . in favor of yet another broad-front effort to go forward everywhere."<sup>54</sup>

This penchant to spread the force evenly instead of concentrating on a narrow breakthrough area was completely in keeping with American operational and tactical activity throughout

the European Campaign. The conservative decision to cut off the German penetration at its waist coupled with the failure to concentrate meant that the Americans missed another opportunity for a large, operationally significant envelopment of German combat power.<sup>55</sup>

### **WW II, Pacific**

The tendency towards attrition in Europe was also evident in the Pacific. The two pronged approach adopted in the Pacific clearly violated the basic requirements of maneuver warfare. Maneuverists argue that combat power should be concentrated and economy of force used in less important areas. The island nature of the Pacific seemed ideal for cutting off and bypassing enemy defenders. The fact that the U.S. adopted two "main" efforts and chose to fight more of the enemy than necessary indicates that our Pacific operations followed the firepower-attrition model.

The senior army commander in the theater was very reluctant to execute maneuver warfare. Despite his later claims,<sup>56</sup> MacArthur consistently opposed a maneuver approach in his campaign. He only adopted maneuver techniques when circumstances forced him to do so. Operation CARTWHEEL, the campaign to take Rabaul, illustrates this point.

The original plan for operation CARTWHEEL envisioned a step-by-step advance up the Solomon Islands chain along with a corresponding advance on the Papua New Guinea coast. The operation was to culminate with a direct assault on Rabaul itself. This was a conservative, conventional approach and MacArthur clung to

the plan even when events indicated that other alternatives might be better. Some of these alternatives were identified by his own staff, but MacArthur continued to veto plans that called for bypassing the strongest enemy fortress in the Southwest Pacific Area (SWPA) theater.

The Joint Chiefs of Staff (JCS) were the first to recognize the need to speed up the CARTWHEEL timetable. They were also acutely aware that the forces MacArthur thought he needed to conduct the operation would not be available.<sup>57</sup> The Chiefs wanted Japan defeated within a year of the fall of Germany and the slow progress in the Solomons was not encouraging.<sup>58</sup> When the central Pacific campaign began to look promising, they did not give it total priority but simply noted that "due weight should be given to the fact that operations in the Central Pacific promise [a] more rapid advance."<sup>59</sup> They told MacArthur to bypass the strong point at Rabaul and continue westward advance along the New Guinea coast.

Despite this clear guidance, MacArthur continued to argue that an attack on the strongest Japanese fortress was the best move. Besides violating the tenets of maneuver warfare, his arguments were not even internally consistent. For example, Chairman of the Joint Chiefs of Staff General George C. Marshall, suggested to MacArthur that he isolate Rabaul by seizing Kavieng and Manus Islands in the Admiralties and capture the Japanese base at Wewak in New Guinea. MacArthur disagreed. He argued that Wewak was too strong for direct assault, and should thus be bypassed and cut off by a landing further to the west. Rabaul--the strongest Japanese fortress in the

area—would have to be captured rather than neutralized. Marshall did not buy this kind of logic and the order to bypass Rabaul stood.<sup>60</sup>

At this point MacArthur began to see the advantages of a maneuver approach to the problem. When he was making his own schedule and had first priority for resources in the Pacific, MacArthur chose to adopt a conservative, step-by-step approach. His early plan eliminated every major enemy concentration in the Solomons before moving on. When faced with reduced resources and a requirement to move faster—both due to competition from the central Pacific effort—he quickly gave up the attack on Rabaul and moved up his timetable. A recent British historian has even suggested that the southwest Pacific commander, "Determined not to be relegated to manager of a sideshow, MacArthur cast about for something dramatic to do—and fastened upon the Admiralty Islands."<sup>61</sup>

MacArthur's uncharacteristic jump ahead of schedule into the Admiralties accomplished all of his objectives. It was an ideal location for cutting off Rabaul and its garrison of approximately 100,000 Japanese soldiers. Perhaps more importantly for MacArthur, it also cut off the navy's argument for priority to the central Pacific. In Washington, the Joint Strategic Survey Committee (JSSC) was proposing that "the primary effort against Japan be made from the east across the central Pacific." MacArthur's theater would "support the primary effort" with whatever resources could be spared.<sup>62</sup> This direct threat to his resources seemed to be more of a motivating factor than MacArthur's desire to conduct maneuver warfare in his theater.

The leap into the Admiralties had the desired effect but seems to have been adopted for the wrong reasons. The early landings shortened the war (perhaps by a month), rendered several invasions unnecessary, and saved some lives.<sup>63</sup> While the results were praiseworthy, the motivation for conducting this maneuver was not. The operation may have been an example of MacArthur recklessly risking the lives of his men for personal gain. The gain, in this case, was a higher priority for resources that kept his theater in the competition.<sup>64</sup> In the event, it gave Marshall the leverage he needed to keep the resources going to SWPA.

An interesting "what if" question concerning the operations in SWPA during 1943 is what might MacArthur have accomplished if he had used this maneuver warfare approach earlier? It had taken him six months to retake Papua, then nine months to cut off Rabaul and clear northeast New Guinea. Once the central Pacific drive threatened to take away resources, however, MacArthur advanced over 1,400 miles from the Admiralties to the western end of New Guinea in less than three months.<sup>65</sup> The key concept followed during the New Guinea operation was "leapfrog" or bypassing Japanese strongholds. The best example of this was the almost 600 mile bound to Hollandia which succeeded in isolating 40,000 Japanese soldiers. Altogether MacArthur succeeded in cutting off some 180,000 troops by "leapfrogging" along the New Guinea coast.<sup>66</sup> Despite this new interest in the indirect approach, MacArthur's subsequent campaign strategy still did not meet the requirements of maneuver theory.

Two actions subsequent to operation CARTWHEEL serve to illustrate this point. First, just as he doggedly stuck to the plan to assault Rabaul, he insisted on attacking Kavieng on New Ireland and later Mindanao in the Philippines. Both of these were Japanese strongholds and both could be isolated by taking other less well defended islands. Admiral William F. Halsey, commander South Pacific (COMSOPAC), was a key player in arguing for the maneuver approach. According to historian John Ellis:

MacArthur was determined to storm Kavieng, and he was only dissuaded by Halsey after three long and stormy personal meetings. Similarly, the decision to bypass Mindanao, which with Rabaul were 'the two dramatic bypasses of the Pacific War,' had little to do with MacArthur. The idea was Halsey's . . .<sup>67</sup>

Based on these performances, it appears that MacArthur was not a completely converted maneuverist.

The second action taken by the SWPA commander that suggest this was his insistence on mopping up Japanese garrisons in his rear even though they were cut off by sea and air. He did this with Australian troops under General Sir Thomas Blamey and again later with General Eichelberger's U.S. Eighth Army in the Philippines. MacArthur employed twelve full brigades of Australians to "mop up" in the Solomons and New Guinea. In a message to Marshall, MacArthur noted that the bypassed Japanese garrisons' "capability for organized offensive activity had passed. The various processes of **attrition** will eventually account for their final disposition."<sup>68</sup> Likewise, Eichelberger employed five divisions making thirty-eight amphibious landings to liberate the remaining islands in the

Philippines. These islands and their bypassed garrisons had no tactical, operational or strategic value.<sup>69</sup> One British historian studying MacArthur's actions noted that prior to this diversion, "His troops had secured almost every strategically relevant point and could have been diverted to more important matters, such as the planned invasion of Japan."<sup>70</sup>

The whole purpose of maneuver war is to defeat the enemy without engaging his main force in a battle of attrition. Despite his sometimes brilliant maneuvers to isolate Japanese garrisons, MacArthur seemed to throw away many of the advantages gained by unnecessarily going back to mop them up.

The tenants of maneuver warfare were not followed either in the overall Pacific theater or in MacArthur's SWPA sub theater. The twin-drive approach taken against Japan is a clear example of a broad front concept rather than the concentrated attack called for by maneuver theory. Within his own theater, MacArthur resisted bypassing large enemy forces until he was threatened with a loss of resources. A recent history of this campaign summed up the results:

Attrition and safety-first were the ground rules for the ground fighting in the Pacific Campaign, which produced no really great general in either command or either service. The by now stupendously overwhelming American superiority had become not an inspiration but a substitute for thought.<sup>71</sup>

Robert P. Patterson, U.S. Secretary of War during the latter part of World War II concluded that "it is the volume of fire that counts. You win if you can kill more of the enemy than he can kill of you. If you cannot, you are defeated."<sup>72</sup> American operational planners in



both Europe and the Pacific apparently agreed with him. Despite some brilliant maneuvers such as the leap into the Admiralties or the Hollandia operation, both the European and Pacific Theaters used power applied in broad strokes rather than knifelike thrusts.

American commanders appeared to favor the power approach in all the theaters of war. MacArthur was no exception. On the other hand, when he was forced to maneuver or lose resources to the navy he executed some of the greatest maneuvers of the war. In 1950 he got one more chance to show what he could do.

### **Korea**

The Korean War can logically be broken into two major parts. The first is the war of movement from the initial communist invasion in June 1950 until the line stabilized in the vicinity of the current Demilitarized Zone (DMZ). The second, the war of attrition or stalemate, from the time the line stabilized until the armistice in 1953. Each of these phases provides a lesson in the evolution of American operations.

To many maneuverists, MacArthur's operational envelopment at Inchon during the movement phase of the war represents maneuver theory in its purest form. This can perhaps best be seen by looking at Inchon with respect to some of the characteristics of maneuver warfare.

The most important consideration defining maneuver warfare is the objective. MacArthur clearly stated the objective for Inchon during a briefing to the Army Chief of Staff and the Chief of Naval Operations almost a month prior to the invasion. No one made a

transcript of this meeting, but historian Clay Blair in his recent book on Korea concludes, "it became obvious that he [MacArthur] was less concerned about tactical maneuvers than he was about delivering a knockout psychological blow." When challenged by some of the non-believers present, he stressed the factor of surprise and the psychological impact of the fall of Seoul on the "oriental mind."<sup>73</sup> Walker "believing the news of Inchon would panic or demoralize the N[orth] K[orean] P[eo]ples A[rmy] forces at the Pusan perimeter." In order to take advantage of this anticipated panic, he asked for a one day delay in his breakout attack.<sup>74</sup> MacArthur also ridiculed the idea of conducting a safer assault further south at Kunsan because it would not have this decisive moral impact. The Inchon operation thus embodied psychological disruption as its basic objective.

The operation also fits the maneuver model in other ways. Inchon clearly used the indirect approach to attack enemy weakness rather than strength. It used firepower to assist, but the defeat mechanism was primarily the maneuver rather than physical destruction of the enemy force. For all of these reasons, MacArthur is often cited as a master of maneuver and Inchon is his masterpiece.<sup>75</sup>

While this operation does illustrate many attributes of classic maneuver theory, there are some less well known aspects that an objective analysis should consider. Four of these are worth considering here. First, MacArthur's motivation for conducting the landing was similar to his reasons for jumping to the Admiralties ahead of schedule. When he made his presentation to the Army and

Navy chiefs, the war had been going on for nearly eight weeks. "His forces had suffered one major defeat after another, incurring appalling casualties. These setbacks had diminished MacArthur's prestige."<sup>76</sup> Clearly he had a personal stake in the success of a glamorous, lightning campaign that could win the war.

Second, MacArthur thought he was outnumbered in the Pusan perimeter and he thought he needed the force multiplier effect only maneuver could give him. The night before the invasion, MacArthur reviewed the pros and cons of the landing with a member of his staff. He concluded that Walker was "hopelessly outnumbered by the hordes of Communists." In order to avoid the slaughter in the attrition battle around Pusan, he concluded that his decision to conduct the amphibious end run was correct.<sup>77</sup> The fact that Walker actually outnumbered his besiegers by over two to one is immaterial since MacArthur was not aware of this fact.<sup>78</sup> This tendency to adopt maneuver techniques when we lack decisive superiority has been consistent in American operations since Vicksburg.

Third, while everyone knows the effect the turning movement had on the NKPA around the Pusan perimeter, fewer seem to be aware of the failure of UN forces to encircle and annihilate them. One reason may have been Eighth Army's over-anxiousness to link up with the Inchon force. Another might be the light infantry nature of the NKPA that allowed them to withdraw over difficult ground. Whatever the reason, Eighth Army had failed to trap the NKPA in South Korea.<sup>79</sup> Historian Clay Blair contends that 30,000-40,000 of the hard corps

NKPA cadre escaped the encirclement. While the figure is not certain, he did discern a pattern in U.S. operations:

Whatever the figure, it was a very serious loss, reminiscent of two major Allied blunders in World War II: allowing a comparable number of German troops to escape from Sicily to fight again; then through the Falaise gap in Normandy.<sup>80</sup>

Encirclement has historically been the most decisive operational maneuver. Korea showed once again that U.S. doctrine was clearly deficient in this regard.

One final point is worth noting with respect to this portion of the war. Most sophisticated maneuvers have required well trained veterans to execute them properly. In Korea, the NKPA soldiers were considerably more experienced than most of MacArthur's troops.<sup>81</sup> Despite this fact, he was able to execute one of the classic turning movements in modern times.

One explanation for this apparent dichotomy is the nature of an amphibious assault. Amphibious operations can be classified as primarily a technical skill similar to those required in the artillery and engineer branches. Despite the relative inexperience among units participating in the Inchon operation, enough technical skill remained from the vast experience gained during the Pacific war to execute the landing.

Another explanation might be related to a comment made in 1984 by army doctrine writer Lieutenant Colonel Huba Wass de Czege concerning the difficulty of implementing sophisticated doctrine: "The historical antidotes for inexperience in the ranks have been increased control, direct methods, and greater reliance on

firepower."<sup>82</sup> Overwhelming tactical firepower present at Inchon made up for deficiencies in combat capabilities of the participating units. The use of amphibious shipping under control of the navy's technical experts, in addition to overwhelming firepower, made up for inexperienced ground forces. Thus, Inchon is one of the few examples where the relatively less experienced side was able to outmaneuver their opponent.

Despite the problems and perhaps excessive risk incurred, the results of Inchon are not disputed. Historian Clay Blair concluded that, "Although documentary proof is lacking, it seems reasonable to suppose that the 'news' of Inchon was an important, perhaps decisive factor in these NKPA withdrawals."<sup>83</sup> After Inchon and the breakout, UN forces had little opportunity to apply operational maneuver in the increasingly stalemated war.

The stalemate phase of the Korean conflict developed when the strategic objectives became unclear. After Truman relieved MacArthur and General Van Fleet replaced Ridgway as Eighth Army Commander, no one was quite sure what the objectives were. Van Fleet pointed this out in a surprisingly candid answer during a news conference.

On Sunday, April 22, 1951, the new commander of Eighth Army, General James Van Fleet, held his first press conference. 'General,' a correspondent demanded, 'what is our goal in Korea?' Van Fleet replied memorably, 'I don't know. The answer must come from higher authority.'<sup>84</sup>

It is not surprising then, that Eighth Army quickly adopted an operational objective of attrition. By June, the Joint Chiefs made it

official by declaring that the objectives were to end the fighting and return to the status quo. They determined that "the mission of Eighth Army was to inflict enough **attrition** on the foe to induce him to settle on these terms.' "85

General Ridgway, both as Eighth Army commander and later as Commander in Chief United Nations Command, along with his replacement at Eighth Army, General Van Fleet, agreed that firepower was the only available solution. They were not allowed to prosecute a decisive deep operation once the political authorities determined that operations north of the 38th parallel were off limits. Once the original border was reestablished, the war of maneuver quickly gave way to an entrenched stalemate similar to World War I. Since the Chinese had vast human resources to draw upon, the only response available was firepower.

Adopting a firepower-attrition based operational concept was logical and effective given the political constraints that prohibited a decisive maneuver. The effects achieved by American artillery and air attacks overshadowed even the titanic barrages seen in the First World War. Modern centralized fire control, coupled with proximity fuzes and vast quantities of ammunition put teeth into Ridgway's "meatgrinder tactics." Newspapers used the term "Van Fleet's Load" to describe the huge tonnage of munitions used. For example, in one infantry battalion, troops huddled in their bunkers while 2,000 shells landed on their position in less than eight minutes. In another battle in April 1953, nine artillery battalions fired a total of 39,694 rounds

to protect one infantry company during a 24-hour period.<sup>86</sup> There can be little wonder at the lessons taken away from this conflict.

The result of this experience was that the American army more closely adopted firepower as its basic doctrine. Americans emerged from Korea firmly convinced that superior equipment and massive firepower could defeat any enemy.<sup>87</sup> In a study of U.S. tactics from 1946 to 1976 Major Robert Doughty summed up the impact of the war on Army doctrine: "The Army had become accustomed to massive amounts of firepower which came at the expense of mobility. . . . Thus, the Army focused upon attrition at the expense of maneuver and its offensive spirit."<sup>88</sup> The Chinese drew the corresponding lesson from their perspective:

Senior Chinese soldiers—if not their leader—emerged from Korea having absorbed the central, critical lesson for the future Asian conflicts: that they must never face a Western army on its own terms. They must seek to fight when Western resources and technology count for the least.<sup>89</sup>

Overwhelming firepower made U.S. combat forces almost unbeatable on the tactical battlefield. Thus prospective opponents were forced to direct their efforts against other centers of gravity besides the mass of our combat power. No one came to understand this better than the North Vietnamese.

### **Vietnam and Reform**

Perhaps the most significant lesson learned from the Vietnam War is the critical importance of understanding operational art. The title of a chapter in a recent history of the war highlights the lack of a clear campaign plan when it referred to our approach as "A Strategy

of Tactics."<sup>90</sup> In his critique of the American involvement in the war, Colonel Harry Summers addressed the same issue: "Because it did not focus on the political aim to be achieved—containment of North Vietnamese expansion—our so-called strategy was never a strategy at all. At best it could be called a kind of grand tactics."<sup>91</sup> American forces essentially fought a campaign with no unifying theater concept other than simply killing enemy troops.

The collapse into a simple strategy of attrition was a result of a lack of clear objectives and unnecessary restrictions. The war of attrition in Korea began when the war aims became murky in the spring of 1951. Likewise, few commanders in Vietnam understood what the strategic or operational objectives were. In a 1974 survey, Brigadier General Douglas Kinnard found that, "almost 70 percent of the Army generals who managed the war were uncertain of its objectives."<sup>92</sup> Added to this uncertainty about the objective were some self imposed restrictions that had a significant effect on operational planning. These included limiting the ground war to South Vietnam, no call-up of reserves, and a requirement to minimize U.S. casualties. Commander US Military Assistance Command Vietnam (COMUSMACV), General Westmoreland, saw no alternative to adopting a campaign plan based on attrition. General Maxwell Taylor, who served as ambassador to South Vietnam during the early years of the war, concluded that, "if the Army was denied a battle of annihilation through an invasion of North Vietnam, then attrition was the closest approximation available."<sup>93</sup> General Westmoreland designed his tail heavy force to fight sustained combat and "just grind



away against the enemy on a sustained basis."<sup>94</sup> In order to execute this constrained operational concept, General Westmoreland decided that technology and firepower would have to make up the difference.

Under these circumstances, it is no surprise that maneuver took a back seat to firepower. A 1969 War College survey of 200 returning commanders found that they overwhelmingly believed that firepower dominated the battlefield.<sup>95</sup> Likewise, in his study of the evolution of U.S. tactics, Major Doughty concluded that "firepower became the dominant characteristic of American operations. Maneuver was used primarily for locating and fixing the enemy."<sup>96</sup> While we won every tactical battle, we lost the war and many people had trouble reconciling the two.

This incongruity caused many to question some well established procedures and raised the level of interest concerning new doctrine. The army's first major doctrinal change after the war faithfully reflected the "lessons" we supposedly learned from the conflict.

The 1976 version of FM 100-5, *Operations*, accurately reflected our experience in Vietnam; unfortunately it failed to correct the problems. In several respects, the "lessons" led us in the wrong direction. Major Paul Herbert's study of the 1976 manual concluded that, "With its emphasis on weapons, firepower, and force ratios, the manual seemed to imply an 'attrition strategy' rather than a supposedly superior 'maneuver strategy.'"<sup>97</sup> He argued that 100-5 accurately reflected the TRADOC commander's personal experience including his service as a division commander in Vietnam. Since there was little operational planning done in Vietnam, it is not

surprising that the manual did not address the problem of campaign design. Herbert noted this oversight:

The failure of FM 100-5 to address corps-and theater-level operations may have been an unconscious legacy of Vietnam, a war in which corps and higher headquarters remained stationary and did not 'campaign' in the traditional sense.<sup>98</sup>

In retrospect, we might consider this period the nadir of maneuver in the American Army, and the peak for firepower-attrition theory. Major Doughty summed up the impact of these trends:

When one considers the long-term development of US Army doctrine after World War II, the amount of firepower has increased—relatively speaking—much more than mobility. And the emphasis on attrition has increased at the expense of maneuver.<sup>99</sup>

Partially in reaction to the 1976 manual, and perhaps due to the inability of America to field a numerically superior force in the face of Soviet military expansion, some doctrine writers decided we once again needed to multiply our physical strength through maneuver. The 1982 version of FM 100-5 consciously attempted to restore the balance between firepower and maneuver. TRADOC's history of this manual summarized the changes:

Leaving behind earlier emphasis on firepower and force ratios, the doctrine of AirLand Battle published in 1982 was an initiative-oriented military doctrine that restored the maneuver-firepower balance, turned attention anew to the moral factors and human dimension of combat, and signaled a return to the fundamental principles governing victory in battle.<sup>100</sup>

This balanced approach accurately reflected the views of the primary writer, Lieutenant Colonel Huba Wass de Czege. Military reformers had attacked the 1976 manual because it seemed to heavily favor

attrition at the expense of maneuver. The maneuverists argued that military problems could best be solved through the indirect approach. While firepower was still important, good armies fired so that they could maneuver rather than maneuvering to get a better position from which to fire.<sup>101</sup> Wass de Czege argued that this was a false dichotomy between maneuver warfare and firepower-attrition based warfare. He insisted that the circumstances of each case determined when a particular approach was more appropriate. The result was a manual in which maneuver and firepower are "inseparable and complementary elements of combat."<sup>102</sup> Along with this new-found balance, the writers of the 1982 manual were able to discern other lessons from our recent Vietnam experience that had eluded the 1976 version.

One of the most significant changes was the inclusion of the operational level of war.<sup>103</sup> Military reformer Bill Lind succinctly explained the problem that marred our Vietnam efforts:

Traditionally, American armies have tried to attain their strategic objectives by accumulating tactical victories. They have given battle where and whenever it has been offered, wearing their enemy down engagement after engagement. This is attrition warfare on the operational level. Even if each battle is fought according to maneuver principles, operational attrition warfare is inappropriate for the smaller force, because even the best-fought battle brings some casualties."<sup>104</sup>

Despite the lack of campaign planning in Vietnam—or perhaps because of this oversight—the new doctrine stressed the importance of linking tactical actions to strategic objectives. The veterans of Hamburger Hill, "search and destroy" operations and other pointless

battles were now writing the doctrine and they made sure the U.S. Army would fight no more Vietnams.

### **DESERT STORM**

The early planning for the ground phase of the campaign in the Gulf War, however, did not seem to benefit from the hard won lessons of Vietnam. When the buildup was well underway, President Bush asked to be briefed on offensive options designed to throw Iraqi forces out of Kuwait. General Schwarzkopf sent his chief of staff, Major General Robert B. Johnson, to brief the plan in the second week of October 1990. General Johnson arrived in Washington with a well developed concept for air operations. The ground portion of the plan, however, was clearly a hasty product and did not incorporate the lessons from our recent experience.<sup>105</sup>

Despite several factors that suggested a maneuver approach, the initial ground plan for DESERT STORM relied on the traditional American method—brute force. In early October, Allied forces were still numerically inferior to the defending Iraqis.<sup>106</sup> Instead of a maneuver based concept that would multiply the power of the available forces, the initial plan envisioned a frontal assault directly into the teeth of the Iraqi defenses. Everyone in Washington from General Powell to the President's advisors quickly discerned that it was an unsubtle, firepower based plan. This approach was inconsistent with the pressing political requirement to keep casualties to an absolute minimum.<sup>107</sup> During the 11 October briefing, even National Security Advisor Brent Scowcroft reportedly asked "Why are you going force-on-force? Why don't you go around and come in

from the side?"<sup>108</sup> Clearly this crisis called for a maneuver rather than attrition approach.

Everyone from the Central Command (CENTCOM) staff, to General Schwarzkopf, and even General Powell claim that the initial plan was never a serious option.<sup>109</sup> No one doubts that the plan would have been modified before it was actually executed. Everyone understood that General Schwarzkopf and his staff were under serious time and resource constraints for planning and executing the operation. The fact remains, however, that American operational planners adopted a traditional approach to the problem in a crisis situation when the traditional approach was clearly inappropriate. The purpose of this paper is to make us more aware of this tendency so that we might avoid similar responses in the future.

Regardless of whether the initial plan was seriously considered or not, the actual "left hook" finally adopted for DESERT STORM struck a better balance between firepower and maneuver. The traditional American application of overwhelming fires was certainly present. Not only were the Iraqi units worn down by the forty day air preparation, but overwhelming, destructive fires were also applied throughout the ground campaign. The use of vast quantities of precision guided munitions made comparisons with past bombardments irrelevant. Considering total destructive force that actually hit the target, this was probably the greatest display of conventional firepower in history. In this respect, the campaign was consistent with American operational traditions. In the realm of maneuver, however, the plan had no precedent.

The "Hail Mary" plan was textbook maneuver warfare. The deep turning movement was designed to disrupt the command and control of the Iraqi Army with the aim of destabilizing them psychologically. The plan was force oriented and aimed directly at the enemy operational center of gravity. The main effort was concentrated against enemy weakness, and the focus was clearly on operationally decisive objectives rather than on uncoordinated tactical successes. The overall concept was encirclement of the entire enemy field army.<sup>110</sup> While all units were not destroyed in the "Basra Pocket," this may mark the most military successful pre-planned encirclement in our history. It was evident to both sides that we had the military power to close off the pocket completely. While the President made a political decision to call for a cease fire, four Republican Guards Divisions escaped only because we let them rather than because we failed to cut them off as happened at Sicily, Falaise and Inchon. In almost every respect, this plan exemplified the basic elements of maneuver theory. A U.S. News and World Report team perhaps best summarized the intent of the key planners:

"The goal of the [special CENTCOM planning staff], with their doctrine of maneuver, was to confuse and terrorize the Iraqis and to force them to surrender or flee, but to avoid battles where possible. In conception and execution, the Allied war plan did just that."<sup>111</sup>

Interestingly, American operational tradition may have contributed to the deception plan. The Iraqis apparently expected U.S. forces to be terrain oriented as most of our operations in the past had been. They planned a conventional defense hoping to

engage the Americans in a face-to-face attrition battle. The initial plan would have played right into their hands by taking the up-the-middle approach.<sup>112</sup> When our uncharacteristic deep envelopment rapidly unfolded, their command and control apparatus was unable to cope.<sup>113</sup> Thus the key tenets of maneuver warfare were amply demonstrated.

The American Army could execute this sophisticated concept with a force that had little combat experience for several reasons not extant in earlier conflicts. First, this was the first truly professional army fielded by the U.S. in the industrial age. Second, new training programs, specifically the Combat Training Center system, allowed American units to make their mistakes in training rather than in their first battles. No American army had ever had this luxury before. The National Training Center played the same role for the U.S. in 1990 as the invasion of Poland did for the Wehrmacht in 1940, or as the Battle of Kasserine Pass did for the U.S. Army in 1942.

The bottom line from DESERT STORM is that American forces executed an Operational plan that balanced firepower and maneuver better than any other campaign in our history. It is certainly true that the Iraqis were not the toughest opponents we ever faced. It is also true that we had sufficient power to overwhelm them through a traditional frontal approach and we did not need to multiply our power through maneuver. This assertion is best supported by the fact that the supporting attack conducted by the Marines along the coast had little trouble punching directly through the strongest part of the defense. It does seem to indicate however, that we broke with

our traditions and conducted a powerful maneuver campaign when we were not forced to do so by circumstances. In this respect, DESERT STORM was unprecedented.

### **V. Conclusions**

Attrition warfare—the wearing down of an enemy by continuing application of massive forces and fires (including and especially nuclear fires) is no longer an appropriate operational concept for military forces of the Free World powers.<sup>114</sup>

General Donn A. Starry

From the Civil War through Vietnam, American operational art has consistently relied on firepower-attrition to win our campaigns. Only in exceptional cases have we exploited the power of maneuver to multiply available combat power. DESERT STORM seems to mark at least a partial departure from this pattern. For the first time, we chose to maneuver—and thus minimize casualties—when a simple, broad front, direct application of power would have accomplished the objective. This paper has reviewed several major factors that contributed to our traditional reluctance to maneuver at the operational level.

Unquestionably, the most significant factor that affected the form of operations selected was relative strength. During most of our wars, Americans have had the advantage of overwhelming material superiority. When we had this superiority, we almost always adopted the conservative approach and used an attrition based operational plan. Grant's campaigns in the Civil War clearly illustrate this trend. In the 1863 Vicksburg campaign, he had no clear superiority of forces. As a result he could not adopt attrition as a



campaign technique. He was basically forced by circumstances to maneuver in order to achieve his objectives. In the 1864 campaign, when he could rely on the combined power of all the Federal armies against the South, Grant could and did rely on attrition.

World War II continued this American operational trend. In Europe, Eisenhower's plan for Normandy was clearly focused on a terrain objective and depended on *Materialschlacht* rather than agility for success. He was constrained in what he could do by political considerations, but the fact remains that the Allied plan in both concept and execution relied on overwhelming power rather than the subtleties of maneuver. In the Pacific, MacArthur did not adopt a maneuver based form of operations until the competing central Pacific campaign threatened his resources. While he succeeded in bypassing large enemy strong points in Rabaul and Mindanao, MacArthur wasted many resources "mopping up" enemy units that had no operational significance. Considering the theater as a whole, the twin drives also indicate a broad front, attrition approach.

Experiences in Korea and Vietnam lend still more evidence to the attrition argument. The biggest exception was the deep turning movement executed at Inchon. While this maneuver had the desired effect of turning the North Koreans out of their positions around Pusan, the failure to encircle and annihilate the enemy highlighted our inability to conduct maneuver warfare at the same level the Germans or late-war Russians did. Once the lines stabilized, operational planning focused on how to best wear down the enemy's

vast human resources. Our well known attrition concept in Vietnam that relied on higher "body counts" as a measure of success needs no further description.

The shining example that breaks this mold is DESERT STORM. The U.S. clearly employed overwhelming combat power against Iraq. Despite this fact, the basic operational concept focused on maneuver and psychological disruption as the defeat mechanism for the Iraqi Army in Kuwait. There is no doubt that we could have simply attacked the enemy head-on and overwhelmed him with firepower as we had done many times in the past. The maneuver approach taken by CENTCOM planners, however, reflects a fundamental change in American operational art.

The primary motivating factor for this break with the past may have been casualty reduction. National Security Advisor Scowcroft clearly understood the implication of the frontal, power approach when the CENTCOM chief of staff briefed the up-the-middle plan. President Bush and his staff were very much aware of the relationship between casualties and political support for the war. Despite overwhelming superiority, we chose to maneuver to achieve our purpose at an acceptable cost. This was unprecedented in American military history.

Several factors combined to allow U.S. campaign planners this new flexibility. One was the professional all-volunteer force. For the first time in the industrial age, Americans entered a conflict with a force capable of conducting sophisticated maneuver operations. Another factor was overwhelming technological superiority.

Technology has always helped Americans overcome a lack of combat experience. From Admiral Porter's brown water fleet in the Vicksburg Campaign to MacArthur's experienced amphibious "technicians" at Inchon, technical expertise has helped American armies make up the usual deficiency in combat experience. Extreme technological overmatch, coupled with the well trained professional force explains much about our success in the Gulf War.

One other aspect of the Gulf War, in contrast to previous conflicts, deserves emphasis. The fact that President Bush clearly defined the political objectives of the war allowed the CENTCOM staff to develop maneuver based war plans. In both Korea and Vietnam, when the objective became vague, operations degenerated into indecisive campaigns of attrition. This is one of the key lessons for future U.S. operations.

Since the Civil War, it seems that American operations have focused on getting there with the most by relying on operations based on the firepower-attrition model. Modern military reformers emphasize getting there first with just enough, thus relying on maneuver and psychological disruption to defeat the enemy. Based on our experience in DESERT STORM, future American operations will employ a more balanced approach. We will continue to fight with overwhelming firepower but if DESERT STORM is an indicator, we will also use maneuver warfare to multiply our combat power and attack the enemy's moral cohesion as well as his physical assets. General Forrest seems to have gotten it about right: "git thar fustest with the mostest."

## **APPENDIX A<sup>115</sup>**

### **FIREPOWER-ATTRITION**

- Attacks Physical
- Focus on Tactical Level
- Terrain Oriented
- Linear deployment
- Smaller Reserve
- Frontal Approach
- Battles Set-Piece
- Move to position to fire

### **MANEUVER**

- Attacks Moral/C<sup>2</sup> (Psychological)
- Focus on Operational Level
- Force Oriented
- Deployment in depth
- Larger Reserve
- Indirect Approach
- Battles Fluid
- Firepower assists Maneuver

### **OTHER CHARACTERISTICS**

- |                              |                              |
|------------------------------|------------------------------|
| • Centralized C <sup>2</sup> | • Decentralized              |
| • Broad Front                | • Narrow Strike Zone         |
| • Superior Resources         | • Inferior Resources         |
| • Heavier Casualties         | • Fewer Casualties           |
| • Conservative               | • <u>Higher Risk</u>         |
| • Conscript, Mass Army       | • Professional, Long Service |

## **Endnotes**

<sup>1</sup> Carl von Clausewitz, *On War* Trans. and ed. Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976) , 67.

<sup>2</sup> Forrest quoted in Mark Mayo Boatner, *The Civil War Dictionary* (New York: David McKay Company, Inc., 1959) , 329.

<sup>3</sup> Clausewitz, 132.

<sup>4</sup> Ibid., 578.

<sup>5</sup> William S. Lind, "The Case for Maneuver Doctrine." *The Defense Reform Debate: Issues and Analysis*. Ed. Asa A. Clark IV, et al. (Baltimore MD: The Johns Hopkins University Press, 1984) , 89.

<sup>6</sup> Richard E. Simpkin, *Race to the Swift: Thoughts on Twenty-First Century Warfare* Vol. 1 of *Future Warfare Series*, 3 vols. (London: Brassey's Defence Publishers, 1985) , 20.

<sup>7</sup> James L. Stokesbury, *A Short History of World War I* (New York: William Morrow and Company, Inc., 1981) , 142, 145, 147-48.

<sup>8</sup> Lind, "The Case for Maneuver Doctrine," 89-90.

<sup>9</sup> Peter Cary, "The fight to change how America fights," *U.S. News & World Report*, 6 May 1991 , 31. This article attributes the development of maneuver theory in the U.S. to the need to defeat the numerically superior Soviet threat. "Commanders were seeking ways to counter the larger Warsaw Pact conventional forces in Europe."

<sup>10</sup> Simpkin, 95-96, 114-15.

<sup>11</sup> Huba Wass de Czege, "Army Doctrinal Reform." *The Defense Reform Debate: Issues and Analysis*. Ed. Asa A. Clark IV, et al. (Baltimore MD: The Johns Hopkins University Press, 1984) , 103.

<sup>12</sup> John Ellis, *Brute Force: Allied Strategy and Tactics in the Second World War* (New York: Viking, 1990) , 429.

<sup>13</sup> James J. Schneider, *Vulcan's Anvil*, Theoretical Paper No. 4 (School of Advanced Military Studies, U.S. Army Command and General Staff College, 1991) , 42. The exact birth date of Operational Art, according to Schneider, is April 4, 1864.

<sup>14</sup> U.S. Army, *FM 100-5 Operations* (Washington: Department of the Army, 1986) , 91-93; Huba Wass de Czege, "Army Doctrinal Reform." 103; William S. Lind, *Maneuver Warfare Handbook* (Boulder CO: Westview Press, 1985) , 4.

<sup>15</sup> Matthew Forney Steele, *American Campaigns* Vol. 1 of (Washington D.C.: Byron S. Adams, 1909) , 402, 417.

<sup>16</sup> R. Earnest and Trevor N. Dupuy Dupuy, *The Encyclopedia of Military History: From 3500 B.C. to the Present* , Revised Edition 1977 ed. (New York: Harper & Row, Publishers, 1970) , 888. 7-19 May, 1863, Big Black River Campaign, Pemberton commanded 35,000; Johnston gathered 9,000; Grant had 41,000. Russell Weigley makes the general comment, "This result he accomplished despite possessing no significant numerical advantage over Pemberton and Johnston. . . . campaign of maneuver. . . at a low cost in lives," in Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* 1977 Paperback edition ed. (Bloomington IN: Indiana University Press, 1973) , 140.

<sup>17</sup> Lind, "The Case for Maneuver Doctrine", 89. See Appendix A for complete comparison of the two theories.

<sup>18</sup> Weigley, *The American Way of War*, 141. "In the Vicksburg campaign he had pursued mainly a geographical objective, which by skillful maneuver he was able to attain without much bloodshed, while gathering in large numbers of enemy soldiers as an incident of attaining the territorial objective." Grant himself noted that Pemberton could have escaped. He noted in his memoirs, "Pemberton might have made a night march to the Big Black, crossed the bridge there and, by moving north on the west side, have eluded us and finally returned to Johnston. But this would have given us Vicksburg." Ulysses S. Grant, *Memoirs and Selected Letters: Personal Memoirs of U.S. Grant, Selected Letters*

1839-1865 Library of America ed. (New York: Literary Classics of the United States, 1990) , 349.

<sup>19</sup> Weigley, *The American Way of War*, 141.

<sup>20</sup> Stephen E. Ambrose, *The Struggle For Vicksburg* reissued 1982 ed. Eastern Acorn Press, 1967) , 10, 43. Ambrose argues that Grant's winter campaign hardened the troops and that they were thus better able to stand up to the rigors of the campaign.

<sup>21</sup> Boatner, *The Civil War Dictionary*. For information on James Birdseye McPherson, 538; For information on John Alexander McClernand, 525.

<sup>22</sup> FM 100-5, 94.

<sup>23</sup> Dupuy and Dupuy, *Encyclopedia of Military History*. 888.

<sup>24</sup> Grant quoted in Schneider, "Vulcan's Anvil", 43. Emphasis added. Original in U.S. Grant, "Report to the Secretary of War on Operations, March 1864-May 1865," July 22, 1865, O.R., ser. I, vol. XLVI, pt. 1, no. 1, p. 11.

<sup>25</sup> Herman Hattaway, and Archer Jones, *How the North Won: A Military History of the Civil War* (Urbana IL: University of Illinois Press, 1983) , 527. Grant considered abandoning his communications and turning Lee's left flank in the 1864 campaign. He remarked that "if I had been as fortunate as I was when I threw my army between Pemberton and Joe Johnston, the war would have been over a year sooner." Ultimately he did not select this plan because he "did not dare this risk." He claimed that his newness to the east was the primary reason for choosing the conservative approach.

<sup>26</sup> Russell F. Weigley, *Eisenhower's Lieutenants: The Campaign of France and Germany 1944-45* (Bloomington IN: Indiana University Press, 1981) , 4-5.

<sup>27</sup> Ibid., 4.

<sup>28</sup> Ibid., 728-29.

<sup>29</sup> Weigley, *The American Way of War* , 359.

<sup>30</sup> Weigley, *Eisenhower's Lieutenants* , 8-10.

<sup>31</sup> Martin van Creveld, *Supplying War: Logistics from Wallenstein to Patton* paperback reprint 1984 ed. (Cambridge: Cambridge University Press, 1977) , 213.

<sup>32</sup> Weigley, *Eisenhower's Lieutenants*, 70.

<sup>33</sup> Ibid., 70-71.

<sup>34</sup> German 346 infantry Division Commander quoted in Ellis, *Brute Force*, 381.

<sup>35</sup> MG John S. Wood quoted in Weigley, *Eisenhower's Lieutenants* 180.

<sup>36</sup> Hanson W. Baldwin, *Tiger Jack* (Fort Collins, CO: The Old Army Press, 1979) , 42.

<sup>37</sup> For evidence concerning Patton's part in the decision to clear Brittany ports see, Ibid., 45; Weigley, *Eisenhower's Lieutenants*, 177.

<sup>38</sup> Weigley, *Eisenhower's Lieutenants*, 175, 177.

<sup>39</sup> Patton quoted in, Ibid., 177.

<sup>40</sup> General Elfeldt quoted in Ellis, *Brute Force*, 385.

<sup>41</sup> Ibid., 385.

<sup>42</sup> Weigley, *Eisenhower's Lieutenants*, 175.

<sup>43</sup> Ellis, *Brute Force*, 386.

<sup>44</sup> Ibid., 392.

<sup>45</sup> Weigley, *Eisenhower's Lieutenants*, 199.



<sup>46</sup> Ibid., 206.

<sup>47</sup> The unit destroyed was the German 177th Infantry Division. Ellis, *Brute Force*, 391.

<sup>48</sup> Eisenhower quoted in Ibid., 412. For the number of divisions provided by each Ally see Ibid. 213.

<sup>49</sup> One of the most surprising aspects to the Hürtgen debacle is the fact that Lieutenant General J. Lawton "Lightning Joe" Collins apparently was in favor of it. Collins, who is considered to be the best American corps commander, fit the mold of a maneuverist. He played a key role in developing the COBRA plan and later, due to his personal supervision, VII corps completed the only successful allied encirclement (Mons) of the pursuit across France. Weigley, *Eisenhower's Lieutenants*, on Collins' role in COBRA, 149; reference Mons Pocket 276; reference Hürtgen Forest, 365.

<sup>50</sup> German general quoted in Ellis, *Brute Force*, 431.

<sup>51</sup> Weigley, *Eisenhower's Lieutenants*, 365.

<sup>52</sup> Ellis, *Brute Force*, 386.

<sup>53</sup> Weigley, *Eisenhower's Lieutenants*, 546. Collins agreed with the assessment that the road network was inadequate.

<sup>54</sup> Ibid., 521. See also Ellis, *Brute Force*, 433.

<sup>55</sup> Weigley, *Eisenhower's Lieutenants*, 561.

<sup>56</sup> MacArthur quoted in Ellis, *Brute Force*, 497.

<sup>57</sup> John Miller, "MacArthur and the Admiralties." *Command Decisions*. Ed. Kent Roberts Greenfield. (Washington D.C.: United States Army, 1984) , 289. "The Joint Chiefs were hardly home from Casablanca when it became obvious that not enough planes and ships could be provided to complete the capture of Rabaul in 1943."

<sup>58</sup> Ronald H. Spector, *Eagle Against the Sun: The American War with Japan* (New York: The Free Press, 1985) , 277.

<sup>59</sup> JCS directive quoted in *Ibid.*, 278.

<sup>60</sup> Miller, "MacArthur and the Admiralties," 290. John Ellis makes MacArthur sound even more recalcitrant in his version: "MacArthur, however, wanted to smash his way into Rabaul, blind to the fact that it was now irrelevant. He argued his case vehemently, before the Chiefs of Staff decided to let Rabaul wither in isolation and instructed MacArthur to leave the great base alone; and he continued to argue even after these clear instructions had arrived." Ellis, *Brute Force*, 498.

<sup>61</sup> Dan van der Vat, *The Pacific Campaign: World War II the U.S.-Japanese Naval War 1941-1945* (New York: Simon & Schuster, 1991) , 311.

<sup>62</sup> JSSC report quoted in Spector, *Eagle Against the Sun*, 284.

<sup>63</sup> Miller, "MacArthur and the Admiralties," 302.

<sup>64</sup> Spector, *Eagle Against the Sun*, 283. Spector's assessment, "MacArthur's gamble at Los Negros had paid off handsomely but it remains in retrospect an unnecessarily reckless gamble."

<sup>65</sup> *Ibid.*, 294.

<sup>66</sup> *Ibid.*, reference Holiandia, 284; 180,000 number cited in Ellis, *Brute Force*, 498.

<sup>67</sup> Ellis, *Brute Force*, 498. Quote within Ellis quote from Lewin. See also van der Vat, *The Pacific Campaign*, 346.

<sup>68</sup> Ellis, *Brute Force*, 499.

<sup>69</sup> On the mop up operations in the Philippines, *Ibid.*, 499; Spector, *Eagle Against the Sun*, 526; van der Vat, *The Pacific Campaign*, 368-69.

<sup>70</sup> van der Vat, *The Pacific Campaign*, 368.

<sup>71</sup> Ibid., 385.

<sup>72</sup> Patterson quoted in, S.L.A. Marshall, *Men Against Fire: The Problem of Battle Command in Future War* Reprinted 1978 ed. (Gloucester, MA: Peter Smith, 1947) , 64.

<sup>73</sup> Clay Blair, *The Forgotten War: America in Korea 1950-1953* Reprint Anchor Book edition, 1988 ed. (New York: Anchor Books, Doubleday, 1987) , 231.

<sup>74</sup> Ibid., 278.

<sup>75</sup> Lind, "The Case for Maneuver Doctrine," 88; Huba Wass de Czege, "Army Doctrinal Reform," 103.

<sup>76</sup> Blair, *The Forgotten War*, 227.

<sup>77</sup> Ibid., 270.

<sup>78</sup> Ibid., 281. Forces in Pusan at time of breakout, 8 Army-150,000 +75,000 rear area personnel; NKPA 70,000, 21,000 combat hardened veterans, 50% of their equipment.

<sup>79</sup> Ibid., 318.

<sup>80</sup> Ibid., 319.

<sup>81</sup> Ibid., Inexperience of 7th Infantry Division discussed on 276.

<sup>82</sup> Wass de Czege, "Army Doctrinal Reform", 103. General DuPuy's experience supports this, see Paul H. Herbert, *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations*, Leavenworth Papers No. 16 (Fort Leavenworth KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1988) , 16.

<sup>83</sup> Blair, *The Forgotten War*, 295.

<sup>84</sup> Max Hastings, *The Korean War* (New York: Simon and Schuster, 1987) , 208.

<sup>85</sup> *Ibid.*, 229.

<sup>86</sup> Robert H. Scales, *Firepower in Limited War* (Washington D.C.: National Defense University Press, 1990) , 17; Jonathan M. House, *Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization*, Research Survey No. 2 (Fort Leavenworth KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1984) , 152-3.

<sup>87</sup> Hastings, *The Korean War*, 334.

<sup>88</sup> Robert A. Doughty, *The Evolution of US Army Tactical Doctrine, 1946-76*, Leavenworth Papers No. 1 (Fort Leavenworth KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1979) , 12.

<sup>89</sup> Hastings, *The Korean War*, 335.

<sup>90</sup> Andrew F. Krepinevich, *The Army and Vietnam* (Baltimore MD: The Johns Hopkins University Press, 1986) , Chapter Six, 164.

<sup>91</sup> Harry G. Jr. Summers, *On Strategy: The Vietnam War in Context* 23 March 1982 ed. (Carlisle Barracks PA: Strategic Studies Institute, U.S. Army War College, 1982) , 56.

<sup>92</sup> *Ibid.*, 66.

<sup>93</sup> Krepinevich, *The Army and Vietnam*, 165.

<sup>94</sup> *Ibid.*, 165.

<sup>95</sup> Scales, *Firepower in Limited War*, 77.

<sup>96</sup> Doughty, *Evolution of US Army Tactical Doctrine*, 38.

<sup>97</sup> Herbert, *Deciding What Has to Be Done*, 97.

<sup>98</sup> Ibid., 99.

<sup>99</sup> Doughty, *Evolution of U'S Army Tactical Doctrine*, 49.

<sup>100</sup> John L. Romjue, *From Active Defense to AirLand Battle: The Development of Army Doctrine, 1973-1982*, TRADOC Historical Monograph Series (Fort Monroe VA: Historical Office, United States Army Training and Doctrine Command, 1984) , Quote is from the Foreword by General William Richardson, iii.

<sup>101</sup> Lind, *Maneuver War Handbook*, 19.

<sup>102</sup> 1982 FM 100-5 cited in Romjue, *From Active Defense to AirLand Battle*, 69.

<sup>103</sup> Ibid., 61, 68-9.

<sup>104</sup> Lind, *Maneuver War Handbook*, 24.

<sup>105</sup> U.S. News & World Report, *Triumph Without Victory: The Unreported History of the Persian Gulf War* (New York: Times Books, 1992) , 157-58, 166.

<sup>106</sup> Despite numerical inferiority (perceived) Norman Friedman, *Desert Victory: The War for Kuwait* (Annapolis, MD: Naval Institute Press, 1991) , 128-9; U.S. News & World Report, *Triumph Without Victory* , 156.

<sup>107</sup> Friedman, *Desert Victory*, 130. U.S. Department of Defense, *Conduct of the Persian Gulf Conflict: An Interim Report to Congress*, Interim Report (Pursuant to Title V Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 (Public Law 102-25), 1991) , 2-7. "Coalition leaders were intent on achieving their objectives with minimum Coalition casualties. . . ."

<sup>108</sup> U.S. News & World Report, *Triumph Without Victory* , 166.

<sup>109</sup> Ibid., 157-58, Schwarzkopf's disclaimer: " 'It was never a recommendation,' General Schwarzkopf said. 'We were asked how

you would do it [invade Kuwait] if you had to do it right now. And this was the only thing that we had available. But it was certainly not the recommended plan.' Powell's disclaimer, "This was a very short-notice briefing. . . . General Johnston made it clear when he briefed it that it was a preliminary view and [that] a lot more work had to be done. . . . I considered it a first cut and I never considered it a plan we would execute."

<sup>110</sup> U.S. Department of Defense, *Conduct of the Persian Gulf Conflict*, 2-6. "The Coalition sought to cut off and destroy Iraq's army of occupation in Kuwait . . . ."

<sup>111</sup> Ibid., 409

<sup>112</sup> U.S. Army, *Operation DESERT STORM Lessons Learned*, Volume III, Operational (Center For Army Lessons Learned, 1991) , III-2-2

<sup>113</sup> Ibid., III-2-10. The AAR cites several examples of Iraqi forces attempting to set up hasty defensive positions on their western flank only to have them overrun before they were set.

<sup>114</sup> General Donn A. Starry quoted in , Simpkin, *Race to the Swift*, x.

<sup>115</sup> Primary source for these characteristics is Lind, "The Case for Maneuver Doctrine," 88, 91-93.

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